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EMPLOYMENT PROBLEMS AND POLICIES IN THE LEAST DEVELOPED COUNTRIES (PDRY, OMAN, YAR)*

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I. Preface and Introduction

This paper[1] deals with the subject of employment and its related problems and policies in the southern region of the Arabian peninsula, an area comprising three states : The People's Democratic Republic of Yemen, the Yemen Arab Republic and the Sultanate of Oman. The region is bounded by the Red Sea to the west, the Gulf of Oman to the east and the Arabian Sea to the south, while the Saudi Arabian and United Arab Emirates borders provide the northern boundaries.[2]

The points of resemblance - rather of similarity - between the three states of the region are many, whether with respect to varying altitude and the resulting varied climate, vegetation and economic activity, to the population and its cultures, customs and attitudes, or indeed with respect to the shortage of information and conflicting estimated statistics, since there has been no census in the area except that carried out in the PDRY in 1973. Its analysis has not yet been completed, though I have a preliminary sample of the results. Similarly, a drinking water sample survey was made for the towns of Sana'a and Hodeida, as well as estimated studies for the Sultanate of Oman, all of which are controversial and can serve only as evidence in arriving at recommendations on what has to be done. The same can be said

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1/ The author extends his thanks and appreciation to a large group of officials and employees in the countries of the Region for their assistance in collecting information and for affording opportunities to exchange ideas, with particular thanks to Dr. Adel Al-Aaqil, Chief Expert of the Central Planning System in the YAR who deserves special credit for the help he has extended in the preparation of this report, and for the ideas, advice and suggestions he has been so kind as to offer; and for his collaboration in the final presentation of this work.

2/ The area of the Region is 778,720 sq. km. approx. distributed as follows :

Yemen Arab Republic	192,000 sq. km.
People's Democratic Republic of Yemen	286,720 sq. km.
Sultanate of Oman	300,000 sq. km.

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about the historical background of the Region, which was subjected - throughout an interval which spanned a considerable pre-Islamic period - to internal conflicts in which foreign powers were involved, and thus the Region, and particularly the interior, fell victim to isolation when maritime European powers technically outwitted, and thus disrupted the Yemeni merchant fleet, after failing to destroy it in battle. The Yemenis and Omanis were able, however, to break the Portuguese invasion. The isolation imposed by local conditions, mountainous terrain and difficult internal communications, resulting in domestic political conflicts cloaked by religious values and sects, has contributed considerably to hindering the capability and aptitude of the Region to adjust to the new conditions and methods of international trade, particularly transit and transportation by sea. This was followed by the impact of the industrial revolution, beginning with the use of steam to power vessels. Consequently, Yemeni and Omani merchant ships, dependent on the winds for power, were unable to compete with the new inventions in the transport trade and hence in charting the course of international trade between East and West.

The question of rainfall and drought is also to be considered. Existing evidence indicates that the Region experienced years of drought during the past and present centuries, a phenomenon which forcibly increased emigration. In Yemen, this has contributed to some extent in making up for the deficit in the balance of payments particularly during the years of drought.

The Region was also exposed to isolation from the outside world. Hence, it was deprived of the various benefits of education, culture, technology, means of transportation and communication. This deprivation imposed a kind of internal seclusion even in regions of the same country and aggravated the problem of backwardness with the exception of Aden which was a business centre under British control. The interior of South Yemen remained closed to the world and generally deprived of education - modern education in particular. The country was also deprived of modern administrative systems, roads and all means of civilization until the days of independence. North Yemen likewise, was shut off and deprived of modern education, good administration and the characteristics

of a modern state until the country was proclaimed a republic. The Sultanate of Oman also experienced the same situation until the year 1970.

On the heels of its sudden awakening and its vehement yearning for progress, the Region has been confronted by the effects of isolation as a factor curtailing development. Basic infrastructure is almost non-existent; administration systems and laws are lacking; the number of capable well-trained people is limited. This problem will continue to be one of the main bottlenecks in the process of development for a considerable period of time.

This paper will deal with the subject of employment and the relevant problems and policies in the Region within the framework of the following broad lines :

1 - Description of the current status of manpower with respect to :
   1) Sex and age grouping
   2) Educational level
   3) Economic activities
   4) Occupation and available qualifications
   5) Employment status

2 - Estimates of the various needs for qualified manpower according to development expectations.

3 - Programmes and projects drawn up to meet manpower needs.

4 - Difficulties and bottlenecks facing the provision of qualified manpower.

5 - General assessment and recommendations.

II. Current Status of Population in the Region

(i) Population Status in the People's Democratic Republic of Yemen

The PDRY is the sole country in the Region where a census has been taken. The first general census was launched in 1973, and its preliminary results appeared in the light of the samples. Work is still underway to process the final results.

Based on the factual findings of the 1973 census, the population of PDRY is 1,590,275 concentrated in the Wadi villages (villages located in valleys) where floods or subterranean waters are accessible, in the mountainous areas which receive rainwater, in coastal villages where fishing facilities are available, and in cities, mainly Aden. There are also the nomads who move about along the fringes of the desert in search of grass.

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The population density is 5.5/sq. km. This meagre density is due to the fact that most of the area of the country consists of desert and barren mountains.

Distribution of Population according to Sex :

Preliminary results of the 1973 census show that the distribution of population according to sex is 787,017 males as compared with 803,258 females, i.e. 49% males, and 51% females, approx. This increase in the rate of females can be attributed to the emigration of males at working age. General conclusions from the preliminary results of the census (Table No. 1) indicate that the urban population constitutes 33% of the total population. Males represent 53% of the total urban population, and females 47%. The increase in the rate of males and the decrease in that of females reflects the effect of male emigration from the countryside and the desert to the towns and, to a certain extent, male emigration abroad.

Table No. 1

Overall Census Statement, PDRY - 1973

Group	Males	%	Females	%	Total	%
Urban	280,171	53	248,892	47	529,063	33
Rural	429,770	48	474,940	52	904,710	57
Nomads	77,076	49	79,428	51	156,502	10
Total	787,017	49	803,258	51	1,590,275	100

Source : Central Bureau of Statistics, PDRY.

Distribution of Population According to Age

Looking at the distribution of population according to age, the preliminary results of the census (Table No. 2) show that the people of PDRY are youthful. This is a common phenomenon in other developing countries. The proportion of inhabitants who are under five years of age is 18%, and of those under 15 years 47% of the total population. Inhabitants aged between 15 and 69 constitute 45% of the total population, while those over 59 years form 7% of the total population. The ages of 1% of the inhabitants are still unidentified.

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Table No. 2

Distribution of Population according to Main Age Groups,

1973

Group	Number	Total of Population %
Inhabitants under 5 years	290,245	18%
Inhabitants under 15 years	752,538	47%
Inhabitants between 15 and 59 years	718,273	47%
Inhabitants 60 years and over	104,279	7%
Unidentified age	15,185	1%
Total population	1,590,275	100%

If these figures are viewed according to sex, we find that group 15-49 years is 44% female and 49% male, and group 59 and over is about 6% male and 7% female. The ages of 1% of males and 6% of females are unidentified.

Assuming that the working age is 15, these figures bring to light several points, the most important of which are :

1. The population will rapidly increase when medical care improves, especially for children.
2. Those entering the labour market will eventually increase. This necessitates that work opportunities be increased to absorb the new labour force.
3. The ratio of dependants to the labour force is quite high with regard to the current age structure, for, as previously stated, those who are under 15 and those above 59 form 54% of the total population; in addition, about 50% of those whose ages range between 15 and 59 represent females and students. The unemployed and those not seeking employment constitute about 22% of the population. Thus the dependency ratio is about 76% of the total population and it will increase if the working age is raised to twenty, which is more accurate, since most of those who are under twenty years, are considered to be still receiving education and training.

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Distribution of Population According to Educational Status :

From Table No. 3 we find that 36% of the population are under 10 years. 46% of the population is illiterate. The illiteracy rate rises to 60% for females whereas it is 32% for males. The rate increases among nomads to reach 66% for females and 58% for males. Illiteracy, in general, is higher among females than it is among males in all sectors, urban, rural and nomad. Regarding urban population, the illiteracy rate reaches 52% for females and 26% for males. In the rural areas it reaches 53% for females and 34% for males. The total illiteracy rate is 34% for males and 60% for females.

The rate of those who can only read and write is 14% of the population, 24% being males and 4% females.

We have noticed the gradual increase of illiteracy among the rural population and urban population. Similarly we find that the number of those who can read and write gradually decreased in the same sectors. Considering females this rate reaches 10% for urban population, 2% in rural areas and 0.5% for nomads, while it reaches 28% for males in urban centres, 24% in rural areas and 7% for nomads.

The number of those who hold any academic certificate amounts to 3% of the population, being 6% for males and 0.09% for females. The percentage for both sexes gradually decreases among the urbans, nomads and rurals being 3% among rural females, 0.01% in rural areas and nil among nomads; while it is 10% among urban males, 3% for rural areas and 0.05% for nomads.

It is regrettable that the preliminary results of the census on which this table is based do not show any details of the number and percentage of various degree holders. Consequently, it is not possible to obtain an idea of the levels of learning and skills, and the extent of their scarcity at these various levels.

The table shows that those whose educational status has not been indicated form 0.09% of the population.

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- Table No. 3 -

Population Distribution According to Educational Status for Urbans and Rurals

Educational Status	Males				Total	Females			
	Urban	Rural	Nomads	Total	Males & Females	Total	Nomads	Rural	Urban
Less than 10 years	91,594	172,912	25,888	290,394	565,866	275,492	26,461	163,661	85,360
%	33	40	34	37	36	34	33	34	34
Illiterate	72,423	136,935	44,819	259,077	736,224	482,047	52,606	298,985	130,456
%	26	34	58	32	46	60	66	63	52
Literate	79,016	104,146	5,535	188,697	222,639	344,042	43	9,515	244,484
%	28	24	7	24	14	4	.5	2	10
Certificate Holders	29,688	13,379	398	43,465	51,014	7,549	-	490	7,059
%	10	3	0.5	6	3	0.9	-	0.1	3
Not identified	7,450	2,398	436	10,284	14,413	4,129	316	2,289	1,524
%	3	0.5	5.6	1.0	0.9	0.5	0.4	5.4	5.6
Total	280,171	429,770	77,076	787,017	1,590,275	803,258	79,426	474,940	248,892
%				49.5		50.5			

Distribution of Inhabitants according to Economic Activities :

Aggregate figures about the distribution of population according to economic activity (Tables No. 4 and 5) show that the rate of the economically active (earners) is 21% of the total population. Among males it goes up to 35%, while among females it drops to 7.4%. The rate of those pursuing economically inactive is 49% of the population (31% of the total number of males and 67% of the total number of females). Individuals under 7 years constitute 26% of the population (26.5% of the total number of males and 25% of the total number of females), i.e. the combined percentage of children under 7 years of age plus those having no economic activity and whose ages are seven and above reaches 79%.[1/]

If we look at Table No. 4 where the different types of economic activities are detailed, we find that agriculture, hunting and fishing absorb 11% of the population, 15% of the males and 6% of the females. These constitute 52.4% of the total economic activity. Public, social and personal services come second to agriculture, hunting and fishing, since the number of those engaged in such activity is 5% of the total population; services therefore form approximately 24% of total economic activity. 2.3% of the total population work in quarrying and mining, manufacturing, electricity, gas, water, and the construction sector. The trade, restaurants and hotels sector comes next with 2% of the total population. Then comes the sector of transportation, storage and communications, which absorbs 1% of the total population. With regard to other activities, the percentage for each is negligible.

The table denotes the limited contribution of females to economic activities in general and to sectors other than agricultural, hunting and fishing in particular. The latter activities claim 6% of the total female number against 17% males. Among nomads it reaches 33% females and 46% males. Table No. 4 summarizes the salient statistics referred to in the previous paragraph.

1/ It is to be noted that the aggregate rates will be limited to 4%. This may be due to the fact that the figures have been calculated on sampling bases.

Table No. 4

Number of Population According to Economic Activity

for 1973

Economic Activity	Number	% of Total
1. Agriculture, fishing and hunting	166,132	11
2. Processing and manufacturing industries and electricity	20,328	1
3. Building and Construction	15,427	1
4. Transport, Communication and Storage	13,299	around 1
5. Trade, Hotels and Restaurants	25,509	2
6. Other Services	152,625	around 9
7. Total Economic Active	393,220	25
8. Not Active	786,018	49
9. Less than 7 years	411,037	26
10. Total Population	1,590,275	100

Distribution of Population with respect to Manpower :

The legal working age varies from one country to another. Some countries consider the age to be 15 years, others 12 and yet others 16. Other countries, however, follow a different pattern, for they consider the working age to be twenty, when the citizen has finished at least his secondary education. The variation in defining the working age leads to different sizes of manpower which a country can depend on as a source of production. Actually, the size of manpower decreases with the increase of education opportunities in a country. Nevertheless, most countries of the world deem the age of 15 the natural threshold for starting work and, hence, production. In Democratic Yemen, the age of seven is deemed the minimum age allowed for engaging juveniles to work. In the light of the minimum working age, we can determine the manpower as presented in the following table (Table No. 5).

Manpower in PDRY calculated on the assumption that the minimum working-age is 7, 10, 15 and 20 years.

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Table No. 5

Manpower in PDRY assuming the minimum working age as 7, 10, 15 and 20

Age Group	Number	% of Total
Labour force (7 - 59)	844,680	53
Labour force (10 - 59)	804,925	51
Labour force (15 - 59)	718,273	45
Labour force (20 - 59)	518,495	33

Table No. 5 clearly shows that manpower constituted 53% of the total population of PDRY, which considers the working age to be 7 years. We notice that this age is relatively low, especially if education in the country is compulsory, as is the case in most of the Arab states. This means that the working age must be raised to a limit of not less than 12 years, at the lowest.

We are more inclined to follow the example of most countries of the world and adopt the age of 15 as a minimum so as to enable the citizens to obtain elementary education and possibly part of their secondary education. On this basis manpower, which constitutes the productive force in the country, drops to 45% of the total population.

Distribution of Population according to Employment Status :

The preliminary results of the 1973 census indicate that the total number of workers in PDRY is 324,055 which is equivalent to 20% of the inhabitants. Add to those 71,522 unemployed individuals, and the total becomes 395,577 or approximately 25% of the population.

The rest of the inhabitants are distributed as follows :

25% are under 7 years of age

44% are not working, nor searching for work

5% are incapable of work

1% not identified

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The structure of the labour force according to sex shows that 82% are males and 18% females. The rate of unemployment among females is higher than that among males, since it is 21% of the total of male workers and 29% of the total of female workers.

The structure of the labour force according to employment status indicates that those actually working constitute 82% and those unemployed 18%.

It is apparent that 38% of those actually working are self-employed and 82% are employees. It is also evident that 88% of the self-employed work on their own, engaging no one, and 70% of the workers are salary earners, while the rest, namely 30%, render free services to their relatives, and they are mainly females. The following table summarizes this status :

Table 7

Distribution of labour force by sex and occupation according to the preliminary results of the 1973 census

Occupation	Males	Females	Total	Percentage of total active	Percentage of labour force
Owner and manager	16,792	268	17,060	5	4
Work on his own account (not employing any one)	86,233	18,896	105,129	33	27
Cash wage	134,688	5,455	140,123	43	35
Non-cash	31,284	30,450	61,734	19	16
Total worker	268,977	55,069	324,064	100	82
Unemployed	55,593	15,929	71,522		18
Total labour force	324,570	70,998	395,568		100

(ii) Current population status in the Yemen Arab Republic

Preamble

At the time when this report was being prepared, the Government of the Yemen Arab Republic was making arrangements for conducting its first census of inhabitants and dwellings (the 1st of February to the 25th of February was set as the date for launching the census). At present, and until the preliminary results appear, the population estimates are contradictory. In this paper, however, we shall resort to the published estimates of the Central Planning Board as a basis for our analysis of the current population status in the country. In addition we shall use, in our analysis, the results of the demographic survey of San'a with regard to percentage rates, and compare them with those of Hodeida. We shall use such results and conclusions as a basis in the presentation of the population characteristics of the Republic, in an endeavour to introduce the necessary amendments related to economic activities, especially in the agricultural sector.

Population estimates according to sex

In Yemen there is no population estimate according to sex for no previous census has been conducted to this effect. All that is presently available can be referred to in the population sampling studies of San'a and Hodeida and other partial estimates which appeared as part of the reports of some UN experts who worked in Yemen. Though these estimates depend upon several tax statements and certain social records and have a considerable margin of error, they will continue to be the basis of our discussion, owing to the fact that they are the only official data available until the population census results, scheduled to be conducted in February 1975 appear. The detailed results of the census are not expected to appear before February 1976. The population of Northern Yemen is estimated to be 6.2 million. In order to reach a reasonable estimate of the population according to sex, the scarce available data have been reviewed. The most important information in these data is a population sampling study of San'a implemented in 1972 by the Central Planning Board in collaboration with the United Nations Economic and Social Office in Beirut (now known as ECWA), and a population sampling study of Hodeida conducted by Italo Consult Company in 1972 in the course of the water project study it was entrusted with. Similarly, some partial information is available on population distribution according to sex and certain age groups from the reports of some UN experts who worked in Yemen in 1970 and 1971. Table No. 8 summarizes the statistics derived by these studies on the distribution of population according to sex, with the help of the population census results of Southern Yemen.

Table 8

Estimates of males and females in certain regions of Yemen

Study	Percentage males	Percentage females
1. Population sample survey of San'a	53.95	46.05
2. Population sample survey of San'a (excluding shops used as houses)	51.20	48.80
3. Population sample survey of Hodeida	52.70	47.30
4. Survey of rural villages	47.20	52.80
5. Preliminary results of census for South Yemen	49.50	50.50

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It is evident that the proportion of males in San'a and Hodeida is not normal, nor does it represent Yemeni Society. Besides, it does not conform with the figures reached in studies carried out on certain Yemen villages. The rise in the proportion of males in towns and its corresponding drop in rural areas can be attributed to the migration of male youths from rural areas to urban areas in Yemen, and, in some instances, their emigration abroad, in search of work and a living. The study made on the town of San'a shows that the proportion of males would drop considerably if those living in shops were not considered. The introductory studies for the preparations of the census in Northern Yemen have indicated a rise in the ratio of females to males in rural areas. Thus, we are inclined adopt a ratio for males falling between the ratio indicated in the studies made on Yemen villages and that given in the census results of Southern Yemen, assuming that the proportion of males is 49 per cent and of females 51 per cent. This assumption is an approximation in order to facilitate estimates until the results of the census become available in the near future. Thus it was possible to estimate the distribution of population of Northern Yemen according to towns and sex, as is shown in table No. 9.

Table 9

Estimates of population distribution according to sex and towns in 1972
(in thousands)

Residence	Males	Females	Total
Urban population	230	210	440
Rural population	2,808	2,952	5,760
Total	3,038	3,162	6,200
Percentage	49	51	100

Distribution of population according to age

In view of the fact that no overall comprehensive data on age distribution of the population is available we took the average age rates derived from the

results of population studies by sample in both San'a and Hodeida. These averages have been applied generally to the total population to arrive at a total distribution of population according to age, after adjustment to eliminate the effect of families composed solely of males.

In table 10 the most outstanding results of this distribution are summarized. The details will be stated in the statistical appendix.

Table 10

Distribution of population by main age groups 1973
(in thousands)

Age group	Males	Females	Total	
			Number	Percentage of total
Under 5 years	621	616	1,237	19.94
Under 10 years	1,145	1,139	2,284	36.83
Under 15 years	1,504	1,508	3,012	48.57
Under 20 years	1,772	1,782	3,554	57.32
15-59 years	1,410	1,524	2,934	47.33
60 and over	124	130	254	4.10
Total	3,038	3,162	6,200	100.00

Table No. 10 indicates that the people of Yemen are preponderantly youthful. The inhabitants under 15 years of age constitute about half the population, those under 10 more than one-third of the population, and those under 5 about one-fifth. Consequently, workers in the economy of Yemen carry a heavy burden of dependants in comparison with other countries.

Distribution of population according to educational status

The distribution of population according to educational status has been estimated in the light of the results of population census conducted in San'a and Hodeida after introducing certain adjustments based on miscellaneous information found in a number of reports prepared by some educational delegations which visited Yemen in recent years. Table No. 11 gives a numerical resumé of the most noteworthy distribution of inhabitants according to the levels of education attained.

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Table 11

Estimates of population distribution
according to educational status in 1973
(in thousands)

Educational status	Number of population	Percentage
Under 10 years	2,284	36.839
Illiterate	3,500	56.452
Literate	326	5.258
Elementary certificate	54	0.871
Intermediate certificate	28	0.452
Secondary certificate	6	0.096
University certificate	2	0.032
Total	6,200	100.000

Table 11 shows that illiterates, including individuals under 10 years of age, form about 93.29 per cent of the total population. The rate of non-illiterates is 6.71 per cent, most of them being those who can only read and write. The percentage of educated individuals drops with the rise in level of education. Those who have acquired an education equivalent to secondary level, are less than one per thousand, and those who have acquired an education equivalent to university level, are less than one per three thousand, which is a very low rate.

Distribution of population according to manpower

Table No. 12 has been prepared on the basis of several assumptions concerning the minimum working age, and on the assumption that sixty is the age of retirement.

Table 12

Estimates of labour force assuming minimum age
as 7, 10, 15 and 20 and the maximum age 59

Age group	Number per '000	Percentage of total
Labour force (7-59)	4,246	68.48
Labour force (10-59)	3,662	59.06
Labour force (15-59)	2,934	47.33
Labour force (20-59)	2,382	38.58
Total	6,200	100.00

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Table No. 12 shows that manpower as a proportion of the total population declines whenever the individuals of the society are provided with better educational opportunities.

Assuming no minimal educational level, manpower - amounting in this case to about two-thirds of the population - would drop to slightly over one-third, for the level of secondary education and the endeavour to educate the society would increase the burden of dependency and exhaust the labour force in the society. Consequently, productive manpower will decrease.

Estimates of labour force and its ratio to population and manpower

In view of the conditions prevailing in Northern Yemen, the age limits of the currently available manpower can be considered as ranging between 10-59. Hence, the appropriate productive power in the society is estimated at approximately 50 per cent of the total population. But, the number of those actually active is much smaller, for several reasons such as self sufficiency, unwillingness to work, lack of adequate and encouraging opportunities which would effectively attract enough manpower to work, and other reasons.

On the basis of San'a and Hodeida population sampling and some partial available data, it has been possible to estimate the labour force, the active and inactive inhabitants as shown in Table 13.

Table 13

Estimates of population distribution according to manpower and labour force in 1973

Status	Number ('000)	Percentage of total	Percentage of group
1. Population distribution			
Manpower	3,662	59.06	39.06
Outside manpower	2,538	40.94	40.94
Total population	6,200	100.00	100.00
2. Manpower distribution			
Labour force	1,800	29.03	49.15
Outside labour force	1,862	30.03	50.85
3. Labour force distribution			
Employed	1,740	28.06	96.67
Unemployed	60	0.97	3.33
Total labour force	1,800	29.03	100.00

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Table 13 shows that less than half of the current manpower in Yemen is actually active, and this active manpower constitutes only about 28 per cent of the total population. As a result, the burden of dependency becomes quite heavy. It should be noted here that the census is an assessment since disguised unemployment is widely spread in Yemeni Society. On the other hand, the application of modern employment and unemployment concepts would pose several questions on the adequacy and conformity of these concepts with regard to the present conditions of the society.

Distribution of population according to economic activities

The great majority of the Northern Yemen population work in agriculture. This sector constitutes the backbone of the Yemen economy. Next come the sectors of Government, trade and services which constitute the main employment sectors after agriculture. Production sectors other than agricultural are very limited due to the backwardness and isolation affecting the Yemen economy over a considerable period of time. On the basis of the results derived from the two population samples of San'a and Hodeida, and on the study of the establishment survey in Yemen early in 1973, it was possible to assess the active individuals in the economic sectors, as summarized in Table 14.

Table 14

Distribution of population
according to economic activity in 1973

Sector	Number ('000)	Percentage of total	Percentage of group
1. Economic active			
(a) Employed	1,740	28.06	16.67
Agriculture	1,560	25.16	86.67
Industry	10	0.16	0.55
Building & constr.	25	0.40	1.39
Trade	45	0.72	0.50
Transport & commu.	10	0.16	0.55
Government	50	0.81	2.79
Other services	40	0.65	2.22
(b) Unemployed	60	0.97	3.33
Total economic active	1,800	29.03	100.00
Inactive population	4,400	70.97	100.00
Total population	6,200	100.00	100.00

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Distribution of population according to employment status

Assessment of the population in Northern Yemen according to employment status has been made in accordance with the incomplete available data and in comparison with the preliminary results of population census in Southern Yemen.

Table 15 presents a summary of the most important data.

Table 15

Distribution of population according to employment status in 1973

Employment status	Number ('000)	Percentage of total	Percentage of group
1. Economic active			
(a) Employed	1,740	28.06	96.67
Self-employed and administrator	8	0.13	0.45
Self-employed not employing anyone	492	7.93	27.33
Cash wage workers	960	15.48	53.33
Non-wage workers	280	4.52	15.56
(b) Unemployed	60	0.97	3.33
Total economic active	1,800	29.03	100.00
Unactive population	4,400	70.97	100.00
Total	6,200	100.00	100.00

(iii) The current population status in the Sultanate of Oman

No accurate data is available on the population in Oman. Estimates, likewise, differ widely. The World Bank 1/ worked out in 1972 a population estimate of 600,000; the Whitehead 2/ report - issued in 1971 - gives an estimate of 450,000 including

1/ Census yearbook, 1972, issued by the National Census Bureau, Ministry of Development.

2/ The Whitehead Report (advisory group), 1972.

expatriates estimated at 15,000. The Ministry of Development 1/ estimates for its planning objectives were 1.5 million. In the 1972 statistical yearbook it was mentioned that no comprehensive census on population is available but its assessments indicate that the population range between 450,000 and 750,000.

The Whitehead Report makes a remark worthmentioning, namely that early in the twentieth century there seemed to be a drop in the Omani population, particularly in the interior. The following points support the validity of this remark:

1. The existence of desolate abandoned villages.

2. The existence of vast areas of arable land presently unexploited, despite substantial evidence that it is arable and was formerly exploited.

The Whitehead Report includes a comparison between the population of Oman in 1908 as then estimated by the British Officer Lorimer and the Whitehead estimates of 1971. Table 16 shows this comparison.

Table 16

Comparison of population of Oman between 1908 a/ and 1971 b/

Region	Lorimer estimate, 1908		Whitehead estimate, 1971	
	Partial	Total	Partial	Total
1. Batinah		105,500		150,000
2. Interior Oman				
Al-Zahera	31,000		68,000	
Eastern Hejjer	98,000		60,000	
Western Hejjer	85,500		8,000	
Hafiam	12,000		24,000	
Oman	34,300		31,000	
Sharkiah	44,000		22,000	
Bouraimi and Aljoa				
Total Interior Oman		305,650		213,000
3. Muscat-Matrah		40,650		25,000
4. Mountains		13,750		7,000
5. Zofar		4,500		15,000
6. Badawins		3,000		25,000
7. Emigrants abroad				15,000
Total		500,050		450,000

1/ Publication (Facts and Figures) issued by the Ministry of Development, Oman, 1973.

Table 16 clearly shows that in 1908 the population of Oman was bigger than it is estimated in 1971. At present, no current criterion is available by which we can examine the validity of the 1908 assessments. Assuming that they are fairly correct, then the viewpoint expressed in the Whitehead Report that the decline in Oman's population is due to emigration will be supported. For the purposes of this study, we consider it appropriate to adopt the World Bank assessments of Oman's population, namely 600,000 including 60,000 male foreigners working there.

Distribution of population according to sex

In view of the fact that no population census and its sex distribution is available, various researchers try to assume various ratios for both males and females. The World Bank, for instance, in its Oman population sex distribution estimates, assumes that males represent half the population viz. 50 per cent which means that the ratio of females is also 50 per cent. Whitehead Report has similarly adopted this distribution. If we take into consideration the ratios of males and females in the neighbouring countries, we find that the rate adopted by either the World Bank or Whitehead Report is biased in favour of males, since the rate of males in these countries is less than that of females due to the temporary emigration of males outside their homeland in search of higher-paid employment. The majority of the emigrants return to their regions to spend a short or long interval of time, depending on the economic situation, particularly agriculture.

At this point, it is worth mentioning that the report on population distribution according to sex in UAE prepared by the Whitehead Consultant Group indicates that the male ratio in UAE is in the region of 57 per cent and that of females in the vicinity of 43 per cent. This seems incongruous. But, if we take into consideration that these regions were basically poorly populated and that male foreigners working there account for great numbers, then the ratio of males would indeed be biased, especially when the process of population assessment is based on actual enumeration disregarding citizenship. Nevertheless, the bias in the male ratio may emanate from the inhabitants' abstention from mentioning the women folk, as is the custom in most Arab countries.

Therefore, assuming that the distribution of the original population according to sex in Oman is similar, in this respect, to the predominant pattern in both Southern and Northern Yemen, and introducing the element of male foreigners in Oman, we conclude that the distribution of the total population according to sex would be approximately 55 per cent males, 45 per cent females. We shall adopt these two ratios as a basis of distribution.

Distribution of population according to age

In Oman there are no data of population distribution according to age covering all the country. But there are estimates to this effect related to Buraimi Oasis which was until recently part of UAE and has been returned to Oman. Similar estimates for UAE have been taken by the Whitehead Consultant Group. The summary of these estimates are presented in Tables 17 and 18.

Table 17

Percentage distribution of population according to sex and age group in Buraimi Oasis

Age group	Males		Females		Total	
	Percentage	Accumulated rate	Percentage	Accumulated rate	Percentage	Accumulated rate
Under 5 years	28.6	28.6	22.6	22.6	25.4	25.4
5-under 10	18.6	47.2	21.2	43.8	20.0	45.4
10-under 15	8.0	55.2	13.1	56.9	10.8	56.2
15-under 20	1.4	56.6	3.6	60.5	2.6	58.8
20-under 25	5.1	61.7	5.4	65.9	5.3	64.1
25-under 30	5.7	67.4	6.5	72.4	6.2	70.3
30-under 40	11.1	78.5	8.7	81.1	9.8	80.1
40-under 50	11.5	90.0	10.7	91.8	11.1	91.2
50-under 60	6.2	96.2	4.1	95.9	5.1	96.3
60 and over	3.8	100.0	4.1	100.0	3.7	100.0
Total	100.0		100.0		100.0	

Source: Report of Whitehead Consultant Group.

Table 18

Percentage distribution of males and females according to age group in UAE, 1971

Age group	Males		Females		Total	
	Percentage	Accumulated rate	Percentage	Accumulated rate	Percentage	Accumulated rate
Under 5 years	11.9	11.9	14.0	14.0	12.8	12.6
5-under 10	14.6	26.5	17.2	31.2	15.8	28.6
10-under 15	8.4	34.9	8.4	39.6	8.4	37.0
15-under 20	9.1	40.0	9.6	49.2	9.3	46.3
20-under 30	22.3	66.3	19.6	68.8	21.0	67.3
30-under 40	17.4	83.7	16.0	84.8	16.9	84.2
40-under 50	9.7	93.4	7.9	92.7	8.9	93.0
50-under 60	4.1	97.5	4.3	97.0	4.2	97.2
60 and over	2.5	100.0	3.0	100.0	2.7	100.0
Total	100.0		100.0		100.0	

Source: Report of Whitehead Consultant Group.

Comparing Tables 17 and 18, there seem to be great and important differences between the population age distribution of Buraimi and the UAE.

It appears that the Buraimi Oasis population are more youthful than the UAE population. In Table 17 we find that inhabitants under 15 years in Buraimi account for 56.2 per cent, while the corresponding group in UAE reaches 37 per cent only. Hence, and in order to obtain estimates of population distribution in Oman according to sex and age groups, we have taken the average age distribution in both UAE and Buraimi, and by applying these averages to the male and female population estimates in Oman, we have been able to prepare Table 19 representing population estimates according to age and sex in Oman.

Table 19

Estimates of population distribution
according to sex and age group in Oman, 1973

Age group	Males			Females			Total		
	Number	%	Accumulated rate	Number	%	Accumulated rate	Number	%	Accumulated rate
Under 5 years	59,388	18.0	18.0	55,998	20.7	20.7	115,386	19.2	19.2
5-under 10	44,804	13.6	34.0	46,752	17.3	38.0	91,556	15.3	34.5
10-under 15	32,108	5.7	41.3	39,518	14.6	52.6	71,626	11.9	46.4
15-under 20	20,582	6.2	47.5	15,196	5.6	58.2	35,778	6.0	52.4
20-under 25	34,108	10.3	57.8	13,256	4.9	63.1	47,364	7.9	60.2
25-under 30	34,696	10.5	68.3	16,316	6.1	69.2	51,012	8.5	68.8
30-under 40	48,748	14.8	83.1	30,944	11.5	80.7	79,692	13.3	82.1
40-under 50	41,164	9.4	92.5	28,458	10.5	91.2	59,622	9.9	92.0
50-under 60	15,288	4.6	97.1	12,852	4.8	96.0	28,140	4.7	96.7
60 and over	9,144	2.9	100.0	10,710	4.0	100.0	19,824	3.3	100.0
Total	330,000	100.0		270,000	100.0		600.000	100.0	
% of total population		55			45			100.0	

This age structure leads us to conclude the following characteristics of Oman population:

1. The ratio of female juveniles exceeds that of male juveniles. The rate of female juveniles under twenty has reached 58.2 per cent approximately, while the rate of male juveniles has reached 47.5 per cent, despite the fact that the number of males in the first age group (under 5) is more than that of females in the same group. This indicates that the death rate among males is higher than it is among females in this stage of life.

2. Expansion of health care together with the improvement of the standard of living will increase the population and decrease the mortality rate especially for children and in particular for male children.

3. The accelerated increase in the ratio of juveniles will lead, in the future, to the increase in the number of those entering the labour market. This will not be a problem for a country like Oman where employment opportunities are increasing, as this country has recently opened its doors to develop its economy and improve the standard of its people.

4. Considering the age of ten as the minimum manpower limit and 59 as the maximum, we find that manpower in Oman is assessed, within the range of these limits, at 373,234, i.e., 62.2 per cent of the total population. The size of manpower decreases when the minimum age is raised in order to provide youngsters with the opportunity to pursue their education instead of entering the labour market. As a result, the burden of dependency on the active labour force will eventually increase.

Estimates of manpower and labour force

It is possible to estimate the manpower of Oman from Table 4, after specifying the minimum age for entering the labour market and the maximum age for leaving it. Assuming that the minimum and maximum ages are 10 and 59 respectively, we find that manpower in Oman accounts for 373,234 individuals, i.e., 62.2 per cent of the population. If the minimum is raised to 15 years to allow the citizen a minimal level of education, manpower will drop to account for 301,608 individuals, i.e., 50.3 per cent of the population. Assuming that no citizen would enter the labour market before the age of 20 and after acquiring a considerable degree of secondary education, then manpower will drop to 44.3 per cent of the population. The following table summarizes these estimates:

Table 20

Estimates of manpower in Oman, 1973

Age group	Males	Females	Total	Percentage total population
Manpower (10-59)	216,664	156,570	373,234	62.2
Manpower (15-59)	184,556	117,052	301.608	50.3
Manpower (20-59)	163,974	101,856	265,830	44.3

With regard to the labour force, a report prepared by the World Bank experts estimates the number of active workers, assuming they are males between 15-60 years, at 25 per cent of the population. The population was estimated by the Bank experts to be 600,000. Another report prepared by Whitehead Consultant Group estimates the labour force in Oman to account for 110,000 including 7,000 foreigners working in Oman. It seems, however, that the picture presented in the World Bank and Whitehead Group estimates underwent great changes in 1973, as the information we had access to at the Auditing and Labour Departments in Oman, during our visit to the country, indicates that the total labour force active in sectors other than agricultural account for 107,073, out of which 62,322 are foreigners working in Oman. If we add those working in agriculture and in other activities, the total of workers will rise to 208,073 distributed as: 145,751 Omanis and 62,322 foreigners. With 5,590 unemployed added to them, the figure reaches 213,663 individuals representing the labour force in the Sultanate of Oman. In the light of this data, table 21 has been prepared.

Table 21 - Breakdown of Manpower and the Labour Force in Oman, 1973.

	Number	% of total population	% of category
Breakdown of Population:			
Manpower	373,234	62.2	62.2
Non-manpower	226,766	37.8	37.8
Total Population	600,000	100	100
Breakdown of Manpower:			
Labour force	213,663	35.6	57.2
Outside labour force	159,571	26.7	42.8
Total manpower	373,234	62.2	100
Breakdown of labour force:			
Employed	208,073	34.7	97.4
Unemployed	5,590	0.9	2.6
Total Labour Force	213,663	35.6	100

Distribution of Workers according to Economic Activity:

The data given on the distribution of workers according to economic activity are sparse and limited with undetailed classifications. We tried to derive from these data preliminary estimates which may be used in comparison and analysis. Relying on the World Bank and the Whitehead Group estimates and on the data available at the Statistics and Labour Departments, we have been able to prepare table 22 which presents a simplified picture on the distribution of workers according to economic activities.

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Table 22 - Estimated Breakdown of Workers by Type of Economic and Sectoral Activity in the Sultanate of Oman (Omanis and Aliens)

Activity or Sector	Number	Percentage		
		of total population	of males	of category
Agriculture	86,000	14.4	39.7	41.3
Fishing	15,000	2.5	6.9	7.2
Government Sector	9,073	1.5	4.2	4.4
Non-agricultural private sector	98,000	16.3	45.2	47.1
Total	208,073	34.7	96	100
Omanis	145,751	34.3	67.3	70
Aliens	62,322	10.4	28.7	30
Male manpower	216,664	36.1	100	100
Total population	600,000	100	339.6	100

From Table 22 a number of important points come into light:

1. Those working in the sectors of agriculture, hunting and fishing account for 48.5% of total workers, while those working in sectors other than agricultural amount to 51.5%. This situation is probably due to the increase in foreigners coming to work in Oman, an aftermath of the development policy the new Sultan has adopted.

2. Workers in the agricultural, fishing and hunting sectors are Omanis. Hence, they account for 46.6% of the total male manpower. Similarly, the percentage of Omanis working in sectors other than agricultural is 25.3%. In other words, 70% of the Omani population live on agriculture, fishing and hunting, while 30% of the population make their living in other sectors.

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3. Omani workers account for 67.3% of the total male manpower, which indicates that expansion in employment opportunities will increase the demand for foreign workers, if women shun the field of work and production.

Distribution of Population with respect to Educational and Professional Levels, and Qualifications

No census in this respect is available in the Sultanate of Oman, due to the only recent establishment of statistics in the Sultanate. Generally it can be said that the percentage of educated persons is very low. The rate of diploma holders is even lower. Public education began to spread rapidly only in 1971/72. It is observed that in the scholastic year 69/70 there were, in Oman, three elementary schools having 900 pupils only; Omani school graduates and degree holders are those who had the opportunity to go to school and acquire education during their stay abroad, as well as expatriates from Zanzibar who have returned from Zanzibar. This category of personnel, boosted by foreign expertise, constitutes the body on which the country depends in running its affairs.

Table 23 represents government personnel, classified according to grades and salaries. From this table we can arrive at the results given in the following table which would enable us to deduce the levels of higher, medium and lower qualifications.

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Table 23 - Breakdown of Employees of the Omani Government by Grade and Level at the end of 1973.

Grade	Omanis	Aliens	Total
Special grade	38	14	52
First grade	229	154	383
Second grade	316	639	955
Third grade			
Level 1	224	423	647
Level 2	633	218	851
Level 3	492	112	1,054
Level 4	149	1	150
Total third grade	1,948	764	2,701
Total fourth grade	4,872	109	4,981
Total number of Government employees	7,403	1,670	9,073

Table 23 shows that high level positions in the administrative system represented by the special, first and second grades account for 15% of total government personnel. 58% of those high-level personnel are foreigners. Besides ministers, this level includes deputy ministers, general directors and advisors, directors, senior medical service officers and others, as well as junior medical service officers, agriculture superintendants and others. This level also includes workers of the second grade, such as private assistants, under-secretaries, assistant secretaries or their equivalent and personnel who are entrusted with medium-level supervision duties.

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The third grade represents middle administrative levels. It includes high clerical positions and their equivalents, chief clerks, junior clerks and typists.

The number of personnel at this grade is 29.8% of total government personnel and 72% of them are Omani citizens.

The fourth grade represents the lowest government personnel level. This includes heavy equipment operators, drivers of transport vehicles, wireless operators, bus drivers, manual workers and office boys.

TABLE 24 ESTIMATED OCCUPATIONAL STRUCTURE OF THE LABOUR FORCE IN SOUTHERN YEMEN IN TWENTY YEARS' TIME ACCORDING TO THE THREE MODELS

Principal Occupational Categories	Model I	Model II	Model III
Medical doctors	800	1,200	2,400
Pharmacists	800	1,200	2,400
Medical aids	1,600	2,400	4,800
Nurses	2,400	3,600	7,200
Total for medical occupations	4,600	8,400	16,800
Engineers	1,200	2,400	4,800
Technicians	3,600	7,200	14,400
Other technical workers	36,000	72,000	144,000
Total for engineering occupations	50,800	81,600	163,200
Teachers	10,000	13,000	17,000
Advanced teachers	3,000	4,000	4,000
Technical instructors	3,000	4,000	5,000
Total for teaching occupations	16,000	21,000	26,000
Agricultural engineers	1,200	2,400	4,800
Agricultural supervisors	6,000	12,000.	24,000
Agricultural labourers	474,000	384,000	274,000
Total for agricultural occupations	481,200	398,400	302,800
Administration and finance	2,400	4,800	9,500
Secretarial and clerical	24,000	48,000	95,000
Total for administrative occupations	26,400	52,800	104,500
Commerce	114,000	142,200	151,200
Services sector	95,000	114,000	132,200
Unskilled workers	104,000	866,000	28,300
Voluntary unemployment	56,000	43,000	23,000
GENERAL TOTAL	948,000	948,000	948,000

TABLE 25 ESTIMATED OCCUPATIONAL STRUCTURE OF THE LABOUR FORCE IN NORTHERN YEMEN IN TWENTY YEARS' TIME ACCORDING TO THE THREE MODELS

Principal Occupational Categories	Model I	Model II	Model III
Medical doctors	3,100	4,600	9,200
Pharmacists	3,100	4,600	9,200
Medical aids	6,200	9,200	18,400
Nurses	9,300	13,800	27,600
Total for medical occupations	21,700	32,200	64,400
Engineers	4,600	9,200	18,400
Technicians	13,800	27,600	55,200
Other technical workers	138,000	276,000	552,000
Total for engineering occupations	156,400	312,800	625,600
Teachers	40,000	56,000	68,000
Advanced teachers	12,000	16,000	16,000
Technical instructors	12,000	16,000	20,000
Total for teaching occupations	64,000	84,000	104,000
Agricultural engineers	4,600	9,200	18,400
Agricultural supervisors	23,000	46,000	92,000
Agricultural labourers	1,922,000	1,551,400	1,120,800
Total for agricultural occupations	1,949,600	1,606,600	1,231,200
Administration and Finance	9,300	18,400	36,800
Secretarial and clerical	93,000	184,000	368,000
Total for administrative occupations	102,300	202,400	404,800
Commerce	430,000	540,000	575,000
Services sector	361,000	430,000	502,000
Unskilled workers	395,000	329,000	108,000
Voluntary unemployment	22,000	163,000	85,000
GENERAL TOTAL	3,700,000	3,700,000	3,700,000

TABLE 26 ESTIMATED OCCUPATIONAL STRUCTURE OF THE LABOUR FORCE IN THE SULTANATE OF OMAN IN TWENTY YEARS' TIME ACCORDING TO THE THREE MODELS

Principal Occupational Categories	Model I	Model II	Model III
Medical doctors	300	450	900
Pharmacists	300	450	900
Medical aids	600	900	1,800
Nurses	900	1,350	2,700
Total for medical occupations	2,100	3,150	5,300
Engineers	450	900	1,800
Technicians	1,350	2,700	5,400
Other technical workers	13,500	27,000	54,000
Total for engineering occupations	15,300	30,600	61,200
Teachers	3,800	4,900	6,400
Advanced teachers	1,200	1,300	1,500
Technical instructors	1,200	1,300	1,600
Total for teaching occupations	6,200	7,500	9,500
Agricultural engineers	450	900	1,800
Agricultural supervisors	2,250	4,500	9,000
Agricultural labourers	182,800	153,550	104,600
Total for agricultural occupations	185,500	158,950	115,400
Administration and finance	900	1,800	3,600
Secretarial and clerical	9,000	18,000	36,000
Total for administrative occupations	9,900	19,800	39,600
Commerce	43,000	52,000	57,000
Services sector	36,000	43,000	50,000
Unskilled workers	39,000	27,000	11,000
Voluntary unemployment	21,000	16,000	9,000
GENERAL TOTAL	358,000	358,000	358,000

III. Assessment of Various Qualified Manpower Needs Assumptions of the Estimates:

Assessment of the various needs for retrained manpower depends on several factors, the most important of which are:

1. The time interval for which needs are intended to be assessed
2. Hypotheses of fundamental society development.
3. Concepts of future training and education trends.
4. The capability of the country to meet such needs, whether from the human or material aspects, within the proposed time interval.

In order to arrive at acceptable assessments pertaining to the need for qualified manpower, it was necessary to assume values and boundaries which would help to achieve the aforementioned factors. The first step to be taken to this effect is to define the most adequate time limit within whose range the various assessments will be effected.

We deem it appropriate that the adequate time limit should be twenty years, considering that a shorter period would hamper the clarity of vision and would not conform with the lowest limits of education and training necessary for reaching the required levels of qualified manpower.

With regard to the hypotheses on the basic development of society, it has been assumed that the country will aim, in the course of the previously defined time limit, at:

1. Achieving a substantial increase in the real national income of the population of the area higher than the rate of their numerical increase. This will increase the individual's share of the national product.
2. Increasing employment opportunities in the country with the purpose of absorbing the new labour force likely to enter the field of employment.
3. Introducing modern technology and adopting it as a basis for establishing the required infrastructure wherever possible.

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4. Providing the society with the basic services in the fields of education, health, agricultural guidance, improvement of the environment, as well as other fields.

With respect to concepts on future training and educational trends during the last stages of the time limit defined above, the following points are proposed:

1. Complete eradication of illiteracy in the region.

2. Providing all citizens with the opportunity to pursue their studies and training until the age of 18.

3. Vocational orientation of education in general.

Basis for Models of Requirements

On the basis of these general assumptions, we have set up three models for what the state of economically-active manpower could be in each of the countries of the observed Region at the end of the period proposed above. In order to prepare each model, the following have been assumed:

1. The population in the Region will increase at the rate of 2.5% annually.

2. The size of the labour force will increase proportional to the total population in view of the increase in employment opportunities and development incentives in such a way that the percentage of the economically active population would rise from its present level of 28%.

3. With regard to medical care, it has been assumed that within twenty years one doctor and one pharmacist will be available for every 3,000 persons for the first model; one doctor and one pharmacist for every 2,000 and for every 1,000 persons for the second and third models respectively. It has also been assumed that each doctor will have two assistant doctors and three nurses.

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4. As for engineers, assistant technicians and technical workers, it has been assumed that there will be one engineer for every 2,000 citizens, one engineer for every 1,000 citizens and two engineers for every 1,000 citizens for the first, second and third models respectively. It has also been assumed that the need for technical assistants is three times the need for engineers, and the need for technical workers is ten times the need for technical assistants.

5. As for agricultural engineers, agricultural advisors and labourers, it has been assumed that there will be one agricultural engineer and five advisors for every 2,000 citizens. The number of agricultural workers, however, represents the projected size of employment in the agricultural field, assuming that this size ranges in the first model between 50-60% of the total labour force and declines in the second and third models.

6. With regard to education it has been assumed that all the population of elementary, preparatory and secondary school age will go to school, and that each classroom will accommodate about 60 students in the first model, 45 in the second and 30 in the third, further assuming that there will be a need for about 10% of reserve teachers and instructors to fill in during emergencies and sick leave taken by the staff. This was the basis for calculating staff requirements by the end of the assumed period of time.

7. With respect to financial executives and their assistant clerks, it has been assumed that for each administrative or financial executive there will be about 10 clerks and assistant employees. We have also assumed, in the first model, that every one thousand active citizens will have one financial and administrative executive; in the second model, every 500 active citizens will have one financial and administrative executive; and in the third model, every 100 individuals of the labour force will have one financial and administrative executive.

8. Concerning non-commercial services employment, it has been assumed, in the first model, that only one individual will work in the field of services for every 1,000 individuals of the active labour force.

This rate has been increased in the second and third models by 20%.

9. In trade, as in the whole service sector, the rate of increase remains unchanged in all the models. The first model, however, has been considered as equivalent to the second model of the services sector.

10. It is also assumed that there will be voluntary unemployment which will continue to exist in accordance with the nature of the inhabitants in the area under study. The rate of voluntary unemployment falls within the range of 6% in the first model, and drops to 4.5% in the second and to 2.7% in the third. In the light of these assumptions, which represent the bases for assessing the concepts of the future labour force position at the end of the defined time limit, it was possible to work out the following tables which present the numerical estimates according to the three variants.

The Policy and Projects of Training and Retraining in the Region

I - The policy and aims of retraining in the PDRY:

Retraining Policy

The policy of the five-year plan of social and economic development (74/7875/69) in Southern Yemen states that one of the basic social tasks of the plan is the increase of work opportunities with the purpose of alleviating unemployment in the republic (within the coming years). The plan aims at an increase of about 95,000 workers distributed throughout various sectors.

1. In the industrial sector, the number of workers will significantly increase as a result of improving and expanding some of the existing installations, and operating new installations, so that the number of workers engaged in them will reach, during the period of implementation, 3,300.

2. In the agricultural sector, the plan aims to increase employment in this sector by 75,000 persons (i.e. an increase of 22% over the year 72/73). This increase will be attained in accordance with the objectives of the plan, and as a result of land reclamation projects, improvement of prevailing agricultural methods, increase in livestock, and development of the fishing industry. The expected increase in the fishing fleet will

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lead to an increase of workers in this branch of the sector amounting to 14,000, (i.e. an increase of 31% over the first year of the plan.

3. In the sector of transportation and communication, the number of workers will increase by 500 persons, (an increase of 11% over the year 1972/73). However, there will be a drop in the number of those engaged in public works as a consequence of completing road building projects towards the end of the fourth year of the plan in 1977/78; these will account for 10,500 workers this year and will drop in 78/79 to the vicinity of 2,000.

4. In the sector of social services and trade, the number of workers, as expected in the plan, will amount to 34,100 persons as compared with 22,500 persons in the first year of operation 72/73 i.e. an increase of 51%.

To develop the level of technology in the national economy sectors and to organize production and administration, the plan aims at raising the citizens level of general education. The plan has been drawn up on the basis of the following:

1. Reaching a stage whereby all children of 7 years will be attending school and endeavouring to attain admission of 80% of the girls of relevant age, by the end of the plan in 78/79.

2. In the preparatory stage, 100% of the male and female students who complete their primary education will be admitted.

3. In the secondary stage, 60% of the male and female students who complete their primary education will be admitted.

Training Projects

In order to realize these objectives, the plan has adopted many projects in the fields of general education and instruction, industrial technical training and agricultural and commercial training, teacher training and higher education. In the field of general education, the plan includes the following:

In the field of general education

1. The construction of 167 elementary schools that absorb 141,000 male and female students.
2. The construction of 93 preparatory schools that absorb 22,400 male and female students, and boarding schols with a capacity of 120 students, within the framework of preparing the teaching staff.

In the field of teacher training

With the increasing number of students, the plan assesses that there is a need to provide 6,000 male and female teachers in addition to the existing number amounting to 770. There is also a need to improve the quality of teaching and developing the educational programmes which necessitates the orientation and retraining of teachers so that they can perform their duties more adequately. In order to face these needs, the plan has adopted the following:

1. Teacher training institutes will graduate 890 (male and female).
2. A summer seminar for teacher training will graduate 1,800 teachers for primary and preparatory schools.
3. Short summer seminars (5-6 weeks) sponsored by the schools will provide 300 instructors.

The Higher Training College 73/74 - 78/79 will graduate 730 secondary school teachers holding baccalaureate degrees and 1,177 preparatory and secondary teachers holding graduation diplomas (2 years).

In the field of technical education

1. Industrial technical education:

In this branch of training the plan has adopted:

(a) Expansion of the secondary section of the Technical Institute to hold 500 students instead of 190 in the year 72/73 to graduate about 500 students within the plan period.

(b) Starting an advanced course in the Institute to include courses of specialization in construction, electronics, mechanics, refrigeration and air-conditioning, telephone and wireless communications and automobile engineering. This division

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has been designed to hold 200 students annually for two years attendance. It is assumed that 200 individuals will graduate from it during the period of the five-year plan.

2. Secondary education in respect to commerce:

This course of education was a course sponsored by the Technical Institute. It has been decided in the plan to transfer it to a new centre to cater for an increase of annual admissions to 90 students instead of 60, which was the average registered in 72/73. This division holds 300 students, male and female with a period of three years attendance. 300 graduates are expected to complete their studies in it within the plan period.

3. Agricultural education and multipurpose schools:

In this respect the Plan envisages the establishment of a technical project.

(a) An Institute of Agriculture to be established in Seyon in collaboration with the World Bank within the period of the five-year plan. It will have a three-year curriculum and will hold about 400 students to be trained in irrigation, agricultural mechanics, electronics and co-operatives. The Institute will also give three-month short courses.

(b) In connexion with multipurpose secondary schools, the plan refers to contacts which were underway during the preparation of the plan with a view to obtaining a loan of 2.2 million dinars for the construction of four preparatory schools, two multipurpose modern secondary schools and two institutes for teacher training, in addition to developing the Technical Institute. It is to be remembered that the agricultural institute in Seyon is included in the project for which the above-mentioned loan is to be obtained.

The Naser Institute of Agricultural Studies:

This Institute was initiated for training semi-skilled staff or engineering assistants in agriculture. The plan stressed the development of the Institute to become an institute of agricultural studies with the purpose of including two categories of trainees: engineers and assistant engineers.

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To this effect, the plan states the following:
The plan is interested in the expansion and development of the Naser Institute of Agricultural Studies so that the Institute will be supplied with the machinery and equipment necessary for training. The installations of the Institute will also be expanded and new divisions built. For this purpose 120,000 dinars from government funds will be allocated. 175 students will graduate from the secondary section within the period of the five-year plan. The period of study in this section will be three years. About 80 students holding the baccalaureate will also graduate after four years of study.

4. Higher education

When we surveyed the aims and prospectives of the plan in the field of teacher training and agricultural and technical training, we observed the existence of a section for higher education belonging to to the College of Education, another section in the Naser Institute of Agricultural Studies and a third in the Technical Institute which would enable the students to obtain a diploma equivalent to that issued by the Institute of Education's two-year course.
The plan also mentions the opening of a college of economy and administration within the first year of the plan, to take in 120 students a year.

5. Orientation abroad

In this connexion the Plan provides for the sending of 1,000 students abroad, within the period of the plan, for university and higher studies, viz, an average of 200 students annually.

Other training projects:

In addition to the above-mentioned projects in the fields of training, there are various other programmes and projects which the plan mentioned as existing projects subject to development, or as new projects considered necessary by the plan. These programmes and projects include the sectors of health, social affairs, labour, education, civil aviation, fisheries,

livestock and irrigation.

The projects can be detailed as follows:

1. In the field of preparing health staff:

The plan takes an interest in the Institute for Developing Health Service Staff. The total annual number of applicants to be accepted will amount to 400. The plan also provides for the opening of two branches of the Institute in the third district to hold 80 trainees a year. The graduates of the Institute within the time limit of the Plan are estimated to be 1,185 male and female nurses, doctors' assistants, X-ray and pharmaceutic technicians, midwives and health inspectors.

2. In the field of labour and social affairs:

(a) Social centres aiming at providing all districts with social and educational services. The plan proposes the construction of four educational and social centres, and the establishment of three centres for social development, in a number of provinces and districts. UNICEF and the Arab League will participate in supplying these centres with the building materials, machinery and equipment necessary for their entry into operation.

These centres will be concerned with developing environmental industries (local crafts) by establishing a unit in each centre for providing training in these types of handicraft. These centres will also be concerned with child and mother care: a health centre will be established in each. Finally, they will be concerned with social and cultural activities taking place in the halls designated for this purpose in each centre.

(b) Juvenile schools and the role of social welfare:

The plan aims at converting juvenile schools to productive schools wherein children receive vocational training and well-integrated social care. For this objective the plan has included the project of the "Social Care Centre" with a capacity of 160 children. The training programme includes carpentry, fitter's work, sewing, shoe-making and agriculture.

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(c) The projected Social Care Centre for girls in the first province will accommodate 20 girls to be trained in sewing and typing.

(d) The projected Social Care Centre for boys in the fifth province, will hold 50 children. The training programme includes carpentry and lathe operation.

(e) The establishment of three social care centres 1974/75.

(f) Providing the blind in Mukalla with machinery and equipment.

3. In the field of education and arts:

The plan refers to the existing Institute of Fine Arts from which 90 artists and musicians will graduate.

4. In the field of civil aviation:

The Plan allots 20,000 dinars for providing the School of Civil Aviation with equipment.

5. In the fisheries sector:

In connexion with this sector, the plan states that the aims of the plan require the preparation of qualified staff for the operation of the commercial fishing fleet and for coastal installations and fishery plants. This preparation will be implemented by way of medium-level training at home (Fishery Institute) and higher training abroad.

6. Livestock:

The plan states that the programmes set up for training personnel in livestock matters will continue to be applied; veterinary centres will be developed and two new centres will be constructed.

7. In the field of irrigation:

It has been decided in the plan to establish a centre to hold 80 trainees for training in irrigation engineering, and to prepare the personnel expected to be enrolled within the period of five-year plan.

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After this survey of the projects and programmes of training in Southern Yemen, we present the following statement on the preparation of the manpower training which the Plan aims to achieve within 5 years:

1. Graduates of vocational training centres and short-term educational courses:

650 graduates from vocational training centres, 8,600 graduates m/1, m/5.

7,000 graduates from agricultural training centres, Ji'ar

800 graduates from the Co-operation Institute

150 graduates from the Research and Training Centre for Fisheries

2. Intermediate and High Institute:

500 graduates from the Technical Institute

175 graduates from Naser College of Agricultural Studies

90 graduates from the Fisheries Centre

50 graduates from the Maritime Institute

120 graduates from the Institute of Social Studies

285 graduates from the College of Economy and Administration

890 graduates of teachers' institutes and related courses

90 graduates in fine arts and music (the Institute of Fine Arts)

884 graduates from the College of Higher Education, the College of Administration and Economy and the Naser College of Agriculture.

These graduates are distributed as follows:

120 economics and administration 76/77/78/79

80 agriculture

684 higher education.

3. Within the time limit of the 5-year Plan there will graduate

170 holders of the Fine Arts Institute diploma

1135 holders of education diploma

80 civil pilots.

1,000 people will be sent to universities abroad for higher education at the rate of 200 a year.

IV. Policy and projects training in the Yemen Arab Republic

Training Policy :

The Yemen Arab Republic attaches great importance to the subject of the development and training of manpower since the planning experience the Yemen went through has indicated that the lack of qualified and trained elements in the technical, administrative and financial spheres is considered one of the most outstanding obstacles facing the process of economic and social development in Yemen. Therefore, the general development strategy in Yemen has concentrated particularly on the development of human resources and on mobilizing the active manpower to be adequately and efficiently deployed in the implementation of development objectives. It also concentrated on the development, backing and establishment of modern institutions, especially economic, in order to raise the level of performance, to improve work conditions, to strengthen apparatus; and to establish modern principles and bases consistent with conditions in Yemen, under which ministries and administration operate, and to introduce a modern standard of development. This would help to expand the capacity of the country with regard to the preparation and planning of projects, their establishment and implementation, and their operation and exploitation, along the lines drawn up for them.

Training Projects :

The tripartite development programme 73/74 - 75/76 of the Yemen Arab Republic includes many development projects. Some of these projects are entirely designated for the processes of training at a level conforming with the needs of the Yemen; and some others include sections, designated for the training of the manpower necessary for the project itself.

In the following we shall briefly review what appeared in the tripartite programme about manpower training.

In the field of agriculture :

1. In order to strengthen the departments of the Ministry in Ta'izz and Aab, the programme has included the sending of eleven engineers abroad for advanced specialization.

2. In order to strengthen the departments of the Ministry in Hodeida, the programme has included the sending of seven engineers abroad for advanced specialization.

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3. The Programme has also included the project of university postponement which aims at sending abroad in two consecutive lots 68 holders of secondary education certificates to specialize in veterinary medicine (10), afforestation (5), maritime fishery (6), raising and production of crops (6) soil science (7), animal products (7), plant protection (4), agricultural economy, statistics and marketing (2), hydrology (2), irrigation engineering (2), agricultural machinery engineering (5), pastures and animal feed (2) and environment (4).

Of this number, 56 will obtain a first class university degree and 12 a second class university degree. The expenses of the project amount to 6.84 million riyals.

4. The agriculture Training Centre in Aab will be operative within the period of the programme. This centre is part of an integrated educational programme, financing of which is both international and bilateral. This centre is the only one of its type in the Yemen, and it aims at graduating veterinary and agricultural technical assistants to work in all parts of the country.

The graduation of the first intake of trainees will take place at the end of the year 79/80. The centre will provide five types of training courses :

(a) Long term (3 years) course to qualify, yearly, 40-60 agricultural advisors at secondary educational level.

(b) Intermediate study course (one year) to train 12 veterinary assistants.

(c) Intermediate training study course (one year) to train 30 holders of elementary certificates who are the children of farmers.

(d) Short training courses (1-2 weeks) for training about 200 farmers a year.

(e) Courses during the period of employment in order to increase the skill of the personnel of the Ministry of Agriculture (2-3 weeks).

5. In the fishing sector, the programme includes the training of local people in sailing and operating fishing boats and in sorting and classification.

6. Similarly, the Veterinary Centre Project in San'a is engaged in training the local people on the diagnosis, treatment and prevention of disease.

<u>In the field of transportation and communications</u> :

1. Support for the Highways Department in its programmes for training Yemenis at home and abroad.

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2. The project of training in equipment maintenance. This project has the power to supervise the Highways Department aided by United Nations Development Programme and aims at :

(a) Training Yemenis in the maintenance of road equipment stored in main warehouses and work areas.

(b) Training Yemenis in the running maintenance of equipment when in operation.

(c) Importing spare parts and maintaining the equipment in hand. The programme was initiated in October 1971. The expenses of the programme are estimated to be 1.7 million riyals within the time limit of the Plan. The UN will pay 1.6 million riyals of these expenses.

3. The Vocational Training School in Ta'izz under the supervision of the Highways Department.

Finance and Trade :

1. Theoretical and applied training of the personnel of the Ministry of Finance and the Department of Taxes.

2. Training of the employees of the Ministry of Economics and those of the Central Planning Bureau.

Education and Teaching :

1. Project of Educational Promotion :

Among other points, the project includes a unit of twenty teaching experts to provide technical expertise and advice in developing the Ministry of Education, preparing modern syllabuses, training teachers and instructors to raise their job efficiency and establishing vocational training institutes in the commercial, agricultural and industrial fields.

Similarly, 35 international experts will be available to provide training in the various institutes which will be established. About seventy Yemeni students will be sent abroad for study and specialization. These will return to work in the establishments and institutes which will be established under the project.

There is also the building management unit, whose task is to supervise the implementation of the following building projects :

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(a) The college of education in San'a designed for the training of secondary and preparatory teachers.

(b) Three institutes for elementary education teachers.

(c) Three multipurpose secondary schools.

(d) An industrial and vocational training institute.

(e) An institute for agricultural training in Aab.

(f) Three institutes for non-governmental teaching.

The project will cost 112.3 million riyals before it is fully completed in 1980.

It is also estimated that the expenses to be incurred during the period of the programme will amount to 63 million riyals. The costs will be met by a loan from the International Development Institution and by aid from the Governments of UAE and West Germany and from the United Nations Economic Development Fund.

2. Training Programme :

The purpose of this programme is to train male and female teachers, administrative personnel and advisors.

It comprises the following courses :

(a) Courses for training male teachers.

(b) Courses for training female teachers.

(c) Courses for training school directors.

(d) Courses for training factory assistants.

(e) Courses for training teachers of mathematics.

The expenses will amount to 878,000 riyals donated by UNICEF as aid to the Government of Yemen.

3. Project to eliminate illiteracy :

This project seeks to render literate about 15,000 male and female citizens among those who missed education, and seeks also to train 100 teachers in methods of eliminating illiteracy and educating the older generation.

The project will cost 600,000 riyals, two thirds of which will come from the Government and one third from UNICEF.

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Health :

1. Project of reinforcing the Health Ministry and its departments :

The project includes the appointment of five Yemeni teachers, five expatriate qualified physicians and one pharmacist, to hold the principal technical positions in the Ministry. Ten Yemeni physicians as well as ten expatriate counterparts will be appointed to run health centres in the provinces. Control teams will be formed to supervise pharmaceutical drugs, foodstuffs and general environmental health.

The expenses are estimated to be about 8.6 million riyals, 5.1 million of which will be raised by a commercial source and 3.5 million riyals by the Government.

2. Strengthening hospital administration and nursing :

This project aims at improving the level of hospital administration, providing nursing services with experience and modern technical methods and training local male and female nurses.

The project applies to three hospitals in the country, each of which will be assigned an administrator, a head nurse and three qualified nurses.

The project also includes granting a number of training scholarships as well as certain medical equipment and instruments, and it will cost about 2 million riyals, of which 1.6 million riyals will be contributed by the United Nations.

3. Manpower Health Institute :

This project was initiated in 1972. It aims at establishing a training centre wherein technical assistants will be trained such as male and female nurses, laboratory technicians, health officers, doctors' assistants, pharmacy assistant and X-ray technicians.

Female nurses will be also trained in Ta'izz and Hodeida as part of the project, the total expenses of which will amount to 12.1 million riyals contributed by the United Nations (7.9 million riyals) and Libya (2.2 million riyals). The remaining 1.2 million riyals will be paid by the Yemeni Government.

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4. Educational missions :

The project aims at sending the following abroad each year for study and specialization : 50 candidates to study general medicine, 20 of whom will be granted scholarships offered by the World Health Organization, 20 will be granted scholarships by the same organization to specialize in the various fields of medicine, three to specialize in public health, two in chest diseases and combating consumption one in anaesthetics and one in laboratory affaris.

A further five candidates will be sent to study dentistry, two to study pharmacy (one of them at the expense of the World Health Organization). The expenses of the project will amount to 5.1 million riyals.

Social Services :

1. The National Institute of Public Administration :

This Institute basically aims at improving the level of administration in ministries and institutes by training their personnel in modern secretarial and financial methods to meet the urgent need experienced by all government systems for cush specialization.

It also includes some activities related to administrative and organizational studies and advisory services and the establishment of a library and a documentation centre.

The total expenses will amount to 7.7 million riyals, 4.6 million riyals of which will be contributed by the United Nations, 1.4 million riyals by the Kingdom of Saudi Arabia and 1.7 million riyals by the Yemeni Government.

2. Television and Broadcasting Institute :

This Institute aims at providing training in television, and broadcasting by giving regular courses. It includes the construction of a two-storey building dapable of expansion and made up of lecture halls and administration and services premises. Expenses will amount to 900,000 riyals sustained by the Government.

3. The Centre for the Blind :

It aims at teaching and training the blind as well as preparing them to practice various manual occupations. The centre includes three buildings to hold 150 blind males and 50 blind females throughout a period of five years at a rate of admission of 40 individuals annually.

The expenses will amount to 991,000 riyals sustained by the Government.

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4. Kindergarten:

The project aims at offering care to children under five years of age by providing them with the adequate environment, qualified governesses, and constructive toys which will prepare the child and develop him mentally, physically and psychologically in a sound way. The Kindergarten will hold about 50 children.

The expenses of the project will amount to 55,000 riyals, 24,000 of which are to be met by UNICEF and 31,000 riyals by the Yemeni Government.

5. Institute of Public Education:

This aims at the occupational training of workers, elimination of illiteracy among them and enlightening them on political, social and educational subjects by setting up an adequate study programme and arranging for lectures, courses, dialogues and multipurpose film shows. The Institute will include four classrooms, a reception hall, a large hall for lectures, conferences, film shows and parties, a research room, a public library, offices for the administration, a staff room and a storeroom for books and other materials.

The expenses will amount to 195,000 riyals.

6. Society Development Centre:

This aims at training adults, male and female, and instructing them in nursing, sewing, home management, artisanship and other vocational activities, in order to train citizens and enable them to gain specific experience which would qualify them to make a decent and satisfactory living.

The Expenses of the project will amount to 400,000 riyals.

V. Training Policy and Projects in the Sultanate of Oman[1/]

Training Policy:

The Policy proclaimed by the Sultanate of Oman in the field of training as it appeared in the Administration Organization Publication issued by the Ministry of Education - aims at the dissemination of education among all individuals, in a well-organized, diversified and controlled manner and in the light of the demands of economic, social and human development, as well as the need to co-ordinate and organize national and official efforts in offering educational services - training and teaching - individually and collectively in accordance with social and human development requirements.

1/ Prepared by D. Omar Al-Sheikh, Education Advisor of the Ministry. Page (5).

Article 2 of the Administrative Structure Regulations of the Ministry provides, to this end for the creation of a department for regular teaching and another for part-time teaching. With regard to the former, article 9 of the above mentioned Regulations provides for the creation of a division for public education, another for vocational instruction, another for religious teaching and a fourth for private teaching. With regard to the latter, article 10 of the same Regulations provides for the creation of four divisions in the Department, namely:

(1) Division of Social Development.

(2) Division for the Eradication of Illiteracy and Adult Education.

(3) Division of Guidance and Training.

(4) Division of Home Study and Correspondence Courses.

In the field of vocational training, article 22 of the Oman Labour Law issued by Royal Decree No. 34 requires that all employers engaging fifty or more workers should contribute to the training of Omanis in the manner resolved by the Minister of Labour, as follows:

1. The establishment of a training centre on the premises of the relevant institution and the drawing up of training and research programmes under the supervision of the Ministry.

2. Participation with owners of similar institutions in the establishment of a training centre, provided that the Ministry shall sponsor the drawing up of the training and research programmes.

3. Financial contribution to the vocational training projects administered by the Ministry at a maximum rate of 5% of the total annual salaries of all the workers.

As mentioned earlier, education in Oman is the project of the new Institute, and it is still at the beginning of the secondary stage.[1/]

This is a fact which must be borne in mind when mentioning the existing projects and those it is intended to establish.

1/ About 22 students for the scholastic years 1972/74.

In the field of regular education :

(1) Speedy acceleration in the rate of elementary education growth in urban and rural areas.

(2) Preparatory education began to grow at a considerably lower rate in view of the scarcity of primary teaching instruction in the above-mentioned Institute.

(3) Secondary education is still in the early stages. The rate of growth will gradually increase during the coming years when current primary pupils reach adolescence.

(4) In the fields of religious teaching and vocational training, the Ministry's plan indicates, under article (9), that these two branches along with the special tutoring division will be established in accordance with the development of education in 1975/76. This indication concerning vocational training is due to the fact that vocational training is still undertaken by a variety of agencies. Training for secretarial activities, for example, was undertaken by the Auditing Department and later by the employees' Office and most recently by the Industrial Institute. Teaching and technical training was undertaken by P.D.O. (Petroleum Development of Oman) and later by the Industrial Institute[2/] under the supervision of the Ministry of Labour. P.D.O. (Petroleum Development of Oman) Company is still active in this field. Training in secretarial activities has been entrusted to the Industrial Institute under the name "Trade and General Studies Division". The Industrial Institute - technical division - gives two types of training :

(1) The first type is given to candidates of primary education level. It includes commerce, electronics, air-conditioning, mechanics, lathe operation, welding, sanitary installations and draftsmanship.

2/ I concluded from discussions with Omani officials that there is a trend towards attaching this institute to the Ministry of Education.

(2) The second type is a pioneer project initiated in November 1974. It started with vocational training. Candidates are not required to have any educational qualifications except the desire to be trained. This type includes two skills considered to have priority in the market, namely carpentry and mechanics. The project is essentially based on training by a "look and imitate" method.

(3) In the field of vocational training by sending candidates abroad, I have concluded, after an interview with the Director of the Labour Department and his deputy, that about 120 trainees were sent to Qatar in 1971 distributed over the fields of carpentry, electronics, air-conditioning, mechanics, lathe operation, welding, construction, sanitary installations and draftsmanship. One hundred of them have already graduated. The policy is underway to pursue this type of training abroad and last year, 1974, a group of fifty candidates were also sent to Qatar.

(4) In this connection, it is worthwhile to mention training in the fields of health, medicine and nursing. The existing number of Omani medical doctors is 17 according to the Director of the Statistics Department in the Ministry of Health. In 1972 four doctors were sent abroad at the expense of the World Health Organization. Besides the 17 doctors, the country depends, in the field of medical services, on expatriate doctors. In the nursing field, a school for training in related subjects was established in 1971. It comprises only three rooms, which is a handicap. Holders of primary education certificates and their equivalent are accepted for admission.

(5) In the area of teachers' and instructors' training: Owing to the fact that education has been only recently introduced in the Sultanate, it is not possible to train teachers of secondary schools in a comprehensive way. This type of training will for a considerable period of time, be restricted to secondary school graduates who are currently studying abroad. The same applies to medical doctors, engineers and agricultural university graduates. The existing projects concerning teachers, administrators, and instructors are based on two types of training.

1. Domestic training conducted as seminars during vacations.
2. Training abroad while in service on a revolving basis. Both types of training encompass methodology, subject-matter, guidance and school administration.

Training Projects:

In the light of the objectives referred to above, the Sultanate is following the trend of adopting two parallel methods, namely, public education - regular and part-time on the one hand, and training and technical instruction, on the other.

In this respect it is observed that education appropriations in the budget of the State are rapidly increasing. During the scholastic year 71/72, for instance, education appropriations went up from about R.O. 1,032,000 to R.O. 2,729,000 and information appropriations, from R.O. 3,050,000 to R.O. 9 million through the consecutive years 72/73, 73/74 and 74/75.

According to a statement made by the Educational Planning Department of the Ministry, the educational programme for the year 74/75 includes:

(1) Expansion of 111 schools in the following manner:

a. Up-grading of schools by way of adding upper classes until schooling stages are fully completed.

b. Increase of streaming in schools in order to provide new students with adequate seats and to alleviate the overcrowding of students in one classroom.

(2) Starting 62 new co-educational schools, distributed among the various educational regions.

Further, the Ministry has resorted to adopting the following steps for the implementation of its plan.

a. The construction of 43 school buildings distributed among the various educational regions.

b. Purchasing 500 tents to be used for teaching purposes, until the construction of new buildings is fully implemented.

c. Purchasing 150 furnished apartments to be used by teachers as living quarters.

The educational projects adopted by the Ministry of Education, and which will be implemented in the near future are:

1. An educational project aimed at developing education at the central authority level and organizing the various agencies of the Ministry.

This project aims at establishing the following institutes :

a. An institute for training Omani teachers (overlooked at the primary stage) prior to and during employment.

b. Two centres for basic education and training, one for males located in Sohar, another for females located in Muscat, with the purpose of teaching adults basic educational skills and manual handicrafts, and in order to alleviate the pressure of older students.

c. The establishment of a secondary agricultural school in Nizwa to qualify workers in the agricultural field and to train employees of the Ministry of Agriculture.

d. Sending missions abroad, to work upon their return in the various educational and teaching centres.

2. The establishment of technical and academic secondary schools, and institutes for training teachers, so that technical education can go hand in hand with academic education, in order to train technical manpower to be employed in the agricultural, commercial and industrial spheres.

Added to this is the establishment of two agricultural schools in different areas so that it will be possible to render services to all the regions of the Sultanate.

The schools scheduled to be established are detailed hereunder :

a. Commercial Secondary School in al-Hamah district
b. Agricultural Secondary School in Sohar
c. Industrial Secondary School in Muscat
d. Teacher Training Institute (male) in the region of the capital
e. Teacher Training Institute (female) in the region of the capital
f. Secondary School for Boys in Sur
g. Secondary School for Girls in Sohar
h. Secondary School for Boys in Nizwa
i. Secondary School for Boys in Salala

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3. Construction of buildings for primary schools.
4. Construction of a secondary school in the region of the capital (lower Muscat).
5. There are suggested educational projects which include the following:
   a. A secondary technical school of petroleum to train technicians and technical assistants to work in the oil industry.
   b. Al-Amal institute for the deaf and dumb.
   c. Two centres for kindergartens.
   d. Ten centres for handicraft training to be given to graduates of the primary stage in the various parts of the Sultanate.
   e. Commercial secondary school for girls.
   f. Preparatory secondary school for gifted children.
   g. Centre for educational media.
   h. Six two-storey primary schools, and 98 one-storey primary schools including living quarters for teachers, instead of the existing school buildings, rented buildings, tents and palm-tree huts.
   i. A building for the Ministry of Education.

According to the information I collected from the Development and Research Department in the Ministry, the plans for establishing institutes for the training of teachers, basic training and education centres and the school of agriculture, fall within the framework of cooperation between the Sultanate on the one hand and UNESCO and the World Bank on the other.

Health training appropriations have been entered in the budget for building a school of nursing. The project, however, has been postponed to the 1975 fiscal year. The capacity of the school has been designed for 120 male and female trainees divided equally.

VI. Bottlenecks and obstacles facing the provision of qualified manpower

The bottlenecks and obstacles facing the countries which have been the point of discussion in this study are almost of the same nature, due to the similarity of historic conditions and circumstances which we pointed out in the introduction to this paper.

We shall briefly survey the most outstanding bottlenecks and obstacles, as follows :

1. Perhaps the principal problems which hinder the efforts exerted in development, in general, and the development of manpower, in particular, lie in the conditions of political unrest the country was subjected to. This led to the flight of a part of the active qualified manpower from home to other countries. That situation also stopped the Omanis who were studying abroad from returning home, thus allowing them to escape the political disturbances and commotion prevailing in the country at that time.

2. The scarcity adequately trained and qualified manpower to undertake the financial, technical and administrative activities necessary for steering the process of development and progress.

3. Extremely feeble administrative systems existed in various sectors and at all levels, especially those of the State.

4. The concept of the modern State was in its infancy, and the traditional administration concept was dominant, not to mention the scarcity of qualified people to fully modernize the administration.

5. Scarcity of qualified personnel to undertake training and activities, whether on the regular or part-time public educational levels, or on the vocational training and education levels.

6. Feeble moral and material incentives, especially in the fields of education and teaching, which led to the migration of those with teaching qualifications to work in institutions where better opportunities were available or to enter the private labour market in the country or abroad in numerous cases.

7. Non-availability of adequate financial appropriations necessary for the processes of training people, due to the insufficient financial resources of the State, and to the inability of its financial agencies to improve means of livelihood and increase resources.

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8. Scarcity of individuals available for occupational training, as the individuals who are adequately qualified in primary and administrative education tend to pursue their general education even further in view of the element of ambition and the material incentive. This phenomenon will continue to persist for a long time.

9. Housing difficulties with respect to qualified manpower returning home from abroad, or with regard to manpower qualified for work in rural areas.

10. Inadequacy of syllabuses and difficulties in obtaining school books, not to mention the fact that the subject-matter of the teaching is not consistent with the demands of the region.

VII. Conclusion and recommendations

Unquestionably, the major bottlenecks facing the process of social and economic development in the three countries of the Region lie in the non-availability of the qualified active manpower called for by the requirements of development itself. Qualifications are predominantly meagre; expertise to steer projects and achieve the desired development is scarce.

In comparing the current status of manpower in each of the countries of the region with the model set up for the State to define the Situation expected to materialize twenty years from now, there emerges the vast difference between the level of the present qualified manpower and the expectations of the first model - which is rather moderate - and the second and third models which are considered as more "ambitious" in their depictions of the standard to be attained by the active manpower in the future, after undergoing training.

If we admit, in principle, that the first model can feasibly represent the reasonable objective sought by the countries of the region of improving their active manpower and creating an accepted social and economic development, and then try to

compare that with the current training possibilities in the States of the Region, it becomes evident that a number of points must be adopted now in order to realize the expectations which are represented in the first model as the lowest level which manpower in the region should attain.

These points may be summarized as follows :

1. Work towards increasing the training capacity of the Region, directly, in the fields of occupational training and education and health services, especially at the primary and intermediate levels, in order to create the required executive basis.

2. An increase diversification and orientation of those sent abroad to cover occupational and employment matters, in order to establish a technical leadership capable of executing projects of social and economic development. It might be necessary to send abroad all graduates of secondary schools in the first stage, rather than have them entering employment with the exception of those who are basically unable to pursue education and lack the necessary prerequisites for further study and admission to university.

3. Resorting to foreign technical aid to meet the current increasing needs for higher and medium-level expertise in the countries of the Region, until the time comes when qualified staff in the Region are assembled, the purpose being that the process of development should not come to a stop in anticipation of the provision of local qualified personnel.

4. Establishing a type of regional co-operation between two or more of the countries of the Region for advances training projects in the desire to render these projects economical and productive.

5. Undertaking vital demographic surveys and studies in order to gain a closer knowledge of the status of the population, and to define the trends of population development in the Region so as to establish the appropriate project necessary for the development of manpower and its co-ordination.

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6. The setting up of a system of material incentives which is commensurate with the type of expertise required and which goes hand in hand with the cost of living in the Region would assist the retention of the current expertise and prevent its migration abroad, and would help to re-attract the expertise and those of the Region working abroad, by encouraging them to return and participate in the process of development and progress.

7. Improving the standard of housing and working towards securing it at reasonable rents to encourage qualified people to return and work in the countries of the Region.

8. Establishing a special fund for supporting and encouraging qualified individuals, either on a regional level or on the local level of each State in the Region. The fund will be financed by the aid offered by the rich countries in the Region and by certain international organizations, as well as by local resources which may be allocated for this purpose.

This aims at providing incentives outside the framework of the budget of each State, which would assist in the settlement of local qualified persons and in attracting those abroad to return to their relevant countries. The fund can be supervised by an independent board, so as to ensure its impartial operation and proper employment in practice.